



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,530	08/07/2006	Keiichihiro Maekawa	107355-00182	2705
4372	7590	03/04/2010	EXAMINER	
ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			OMCBA, ESSAMA	
			ART UNIT	PAPER NUMBER
			3726	
			NOTIFICATION DATE	DELIVERY MODE
			03/04/2010 ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com  
IPMatters@arentfox.com  
Patent\_Mail@arentfox.com

# Office Action Summary

**Application No.**

10/559,530

**Applicant(s)**

MAEKAWA ET AL.

**Examiner**

Essama Omgba

**Art Unit**

3726

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/DE)  
Paper No(s)/Mail Date 12/2/2005 & 10/9/2007
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: on page 12, lines 2 and 9, "attitude" should read --altitude--; on page 13, line 24, page 14, line 14 and page 16, line 10, "absorbed" should read --adsorbed--.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 1-4 are objected to because of the following informalities: in claim 1, line 3 and claim 3, line 3, "attitude" should read --altitude--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3 recite the limitation "the ends" in line 15 of each claim. There is insufficient antecedent basis for this limitation in the claims.

Furthermore it is not clear which ends are being referred to.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanayama (US Patent 4,715,772) in view of Morgan (US Patent 5,046,851).

With regards to claims 1 and 3, Kanayama discloses a method and a device for mounting an automotive window glass 13 by which a window glass which is held at a window glass holding member 7 provided at a tip of an altitude-adjustable robot arm 2, and which is at least curved in the crosswise direction corresponding to the width direction of a body of an automobile (conventional in the art), is positioned on a window glass mounting opening provided on the body of the automobile, and is mounted onto a window glass mounting surface on the circumference of the window glass mounting opening, the method comprising moving the window glass to just above the window glass mounting opening according to amounting position on the window glass mounting surface by driving and controlling the robot arm with a robot control unit 5 (col. 3, lines 21 to col. 4, line 68). Kanayama does not disclose irradiating both ends approximately at the same position as each other at least in the crosswise direction of the window glass with a slit laser beam from upward at an angle with regard to the perpendicular direction to the surface of the window glass held at the window glass holding member

across the right and left ends of the window glass, the window glass mounting surface and a surface of the body at a position which is higher than that of the window glass mounting surface outside the window glass mounting surface, photographing bent laser beams, which are formed, using the slit laser beams irradiated across the right and left ends of the window glass, the window glass mounting surface and the surface of the body, the beam being formed by clearances in the perpendicular direction to the surface of the window glass, approximately in the perpendicular direction to the surface of the window glass at the right and left ends of the window glass, calculating at least, a difference between the clearances, in the perpendicular direction to the surface of the window glass, between the right and left ends of the window glass and the surface of the body based on a predetermined processed image generated by image processing of photographed images of the laser beams, and calculating a rotation amount in a rotation direction around the perpendicular direction to the surface of the window glass, wherein the rotation amount is required to be adjusted in such a way that the calculated difference between the clearances becomes zero, rotation adjusting the window glass held at the window holding member by driving and controlling the robot arm according to the rotation amount calculated, and mounting the window glass, which has been rotation adjusted, onto the window glass mounting surface in the perpendicular direction to the surface of the window glass. However Morgan teaches such an irradiating, photographing, calculating, rotation adjusting and mounting process, including a robot control unit, a pair of slit laser beam irradiating units, a pair of photographing units, an image processing unit, and a calculating unit, see column 2, lines 59 through column 9,

line 15. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have incorporated the process of Morgan to the process of Kanayama, in order to better fit the window glass to the window glass mounting surface by sensing rounded corners.

Regarding claims 2 and 4, see column 5, lines 1-20 and figure 8 of Kanayama.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/  
Primary Examiner, Art Unit 3726

eo  
February 26, 2010